Amendments to the Specification

Please replace the paragraph beginning at page 7, line 26, with the following rewritten paragraph:

FIG. 5 shows an exemplary method for refining a predictive model. At 522, pre-hire information for applicants is collected based on pre-hire content (e.g., predictors such as questions on an employment application or predictors collected from other sources). At 532, post-hire information for the applicants is collected. At 542 a predictive model is constructed. The model can be deployed and model output used for hiring recommendations. At 552, the pre-hire content can be refined (e.g., one or more ineffective questions can be removed and one or more new ones can be added). Then, additional pre-hire information can be collected at 522 (e.g., based on the refined pre-hire content). Eventually, a refined model can be generated.

Please replace the paragraph beginning at page 9, line 3, with the following rewritten paragraph:

FIG. 8 is a block diagram showing an exemplary system 802 for providing employee selection. An electronic data interrogator 812 is operable to present a first set of a plurality of questions to an individual. An electronic answer capturer 822 is operable to electronically store the individual's responses to at least a selected plurality of the first set of questions presented to the individual.

Please replace the paragraph beginning at page 13, line 18, with the following rewritten paragraph:

One possible way of building a neural network is to divide the input data into three sets: a training set, a test set, and a hold-out set. The training set is used to train the

model, and the test set is used to test the model and possibly further adjust it. Finally, the hold-out set is used as a measure of the model's ability to generalize learned pattern information to new data such as will be encountered ~~with~~ <u>when</u> the model begins processing new applicants. For example, a coefficient (e.g., 0.43) can be calculated to indicate whether the model is valid based on its ability to predict values of the hold-out set. Various phenomenon related to neural networks, such as over-training can be addressed by determining at what point during training the neural network indicates best performance (e.g., via a test set).

Please replace the paragraph beginning at page 16, line 22, with the following rewritten paragraph:

Subsequently, after pre-hire and post-hire information for a number of employees was collected, the new model 1102 was generated from the collected information. Two of the new questions were found to be effective predictors, so they ~~was~~ <u>were</u> included in the refined model as IN_8 and IN_9. IN_4 and IN_5 do not appear because they had been earlier found to be ineffective predictors.

Please replace the paragraph beginning at page 22, line 5, with the following rewritten paragraph:

Neural networks (also commonly called "neural systems," "associative memories," "connectionist models," "parallel distributed processors," and the like) can be computer simulations of neuro-physiological structures (e.g., nerve cells) found in nature. Unlike expert systems, artificial neural networks can learn by association or experience, rather than being programmed. Like their biological counterparts, neural ~~neworks~~ <u>networks</u> form internal representations of the external world as a result of exposure to stimuli. Once trained, they can generalize or make inferences and predictions about data

that they have not been exposed to before. Neural networks are able to create internal models of complex, nonlinear multivariate relationships, even when the source data is noisy or incomplete. It is this capacity to function with uncertain or fuzzy data that makes a neural processor valuable in the real world.

Please replace the paragraph beginning at page 43, line 23, with the following rewritten paragraph:

When this type of feature selection was applied to tenure prediction, 56 questions (see Tables 4 and 5) were selected [h]as having the most predictive value with respect to applicant tenure.

Please replace the paragraph beginning at page 49, line 6 (table), with the following rewritten paragraph:

Table 5 – Pre-hire Content Examples (e.g., Hourly Workers)

1. You have confidence in yourself.
2. You are always cheerful.
3. You get mad at yourself when you make mistakes.
4. You would rather work on a team than by yourself.
5. You try to sense what others are thinking and feeling.
6. You can wait patiently for a long time.
7. When someone treats you badly, you ignore it.
8. It is easy for you to feel what others are feeling.
9. You keep calm when under stress.
10. You like to be alone.
11. You like to talk a lot.
12. You don't care what people think of you.
13. You love to listen to people talk about themselves.
14. You always try not to hurt people's feelings.
15. There are some people you really can't stand.
16. People who talk all the time are annoying.
17. You are unsure of yourself with new people.
18. Slow people make you impatient.
19. Other people's feelings are their own business.
20. You change from feeling happy to sad without any reason.
21. You criticize people when they deserve it.
22. You ignore people you don't like.
23. You have no big worries.
24. When people make mistakes, you correct them.
25. You could not deal with difficult people all day.

Please replace the paragraph beginning at page 57, line 20, with the following rewritten paragraph:

3. Generate T'_{k+1} by adding the IV to ~~numbers~~ <u>members</u> of T_k which generates the set T_{k+1} with the largest transmission values. Note that T'_{k+1} is a subset of T_{k+1} since it contains only those members of T_{k+1} which can be generated from T_k by adding one independent variable to each transmission.

Please replace the paragraph beginning at page 59, line 2, with the following rewritten paragraph:

An interesting aspect of the application questions chosen by the feature selection method was the mix of bio-data and psychometrics. Of the 56 features used as inputs for the most successful model, 31 came from the bio-data section of the application and 25 came from the psychological assessment. Of particular interest was the "coupling" of certain bio-data and assessment questions. Such pairs would appear together throughout the analysis of transmission over a range of cardinalities[.] (e.g., they would appear as a highly predictive pair and would subsequently appear together in higher-order sets of IVs).